

## A new Procecidochares from Eupatorium Stems

(Diptera: Tephritidae)

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The fruit fly here described was first discovered in Mexico in 1944 forming a stem gall on *Eupatorium adenophorum*, and it has since been introduced into the Hawaiian Islands. It apparently has become established there, and since it may prove to be of value in the control of its host, which is a plant pest in Hawaii, a name for it becomes desirable.

### *Procecidochares utilis*, new species

**Female.** *Head:* Width 1.26 mm.; width of vertex across median ocellus 0.49 mm.; somewhat narrowed below; eye height 0.84 mm.; length of antenna 0.40 mm. Occiput dark, with thin gray pollinosity, this color also covering the ocellar region and forming a narrow stripe on each side to the upper orbital bristles; vertex yellow-orange, yellower along eye margins; lunule, frontoclypeus, and genae yellowish white; antenna orange, the first two segments with dark setae; arista dark with yellowish base; palpi yellow-orange with dark-brown setae; postvertical and postorbital setae yellowish white, the vertical, ocellar, and orbital bristles black; two or three lower orbitals.

*Thorax:* Black, the notum shining except for the humeri, notopleura, transverse suture, and a median stripe lying between the dorsocentral bristles, which are subshining to distinctly gray as a result of very fine, closely appressed microsetae; these non-shining parts with flattened, suberect, white setae forming a more or less distinct pattern, consisting of a narrow median stripe which forks before the scutellum, a dorsocentral stripe on each side diverging laterally to form a strong row broken medially in front of the scutellum, and a border around each presutural shining area; also a few in an oblique line on each presutural shiny area, and a few at the base of the supra-alar bristle; all bristles black; two or three dorsocentral bristles, the presutural sometimes lacking; pleuron with thin gray pollinosity and flattened whitish setae; one posterior sternopleural bristle. Postnotum black; metanotum with gray pollinosity. Wings (fig. 1) with brown pattern as figured; no setae on vein  $R_{4+5}$ . Halteres yellowish white, the knob sometimes darkened. Legs yellow-orange, the coxae and basal half or more of the femora usually infuscated.

*Abdomen:* Black; tergites 1 and 2 and anterior portions of tergites 3 and 4, widening medially, subshining; rest of dorsum and the sternites shining; dorsum of abdomen with abundant white, flattened setae; ovipositor sheath and venter with very fine pale setae; ovipositor sheath 0.84 mm. long, about twice as wide basally as at apex; ovipositor 0.63 mm. long.

**Male.** Apparently identical with female except for genital structures. Presutural dorsocentral bristles less often present.

<sup>1</sup> Aldrich, J. M. U. S. Nat. Mus. Proc. 76(2): 1-13, 1929.

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**Type Material.** All reared from stem galls on *Eupatorium adenophorum* by N. L. H. Krauss. *Holotype* ♀, Cuernavaca, Morelos, Mexico, July 31, 1944 (U. S. National Museum Cat. No. 57981). *Paratypes*, 1 ♀, 1 ♂, same data as holotype; 4 ♀ ♀, 1 ♂, Cuernavaca, August 13, 1944 to October, 1944; 14 ♀ ♀, 11 ♂ ♂, Tantalus, Oahu, Hawaii, March 1946. *Paratypes* in the U. S. National Museum and the collection of the Hawaiian Sugar Planters' Association.

This species is quite distinct from any of the described species. In Aldrich's<sup>1</sup> key to the North American species, certain specimens with yellow legs might run to *flavipes*, but *flavipes* is smaller with a different scutal pattern. Specimens with the normally darkened femora would go to *anthracina* or *pleuralis*, depending upon the presence or absence of presutural dorsocentral bristles, but *utilis* differs from the former in having the pleura pollinose and the ovipositor sheath shorter, and from the latter in the narrower posterior hyaline triangle of the wing and the shorter ovipositor sheath.

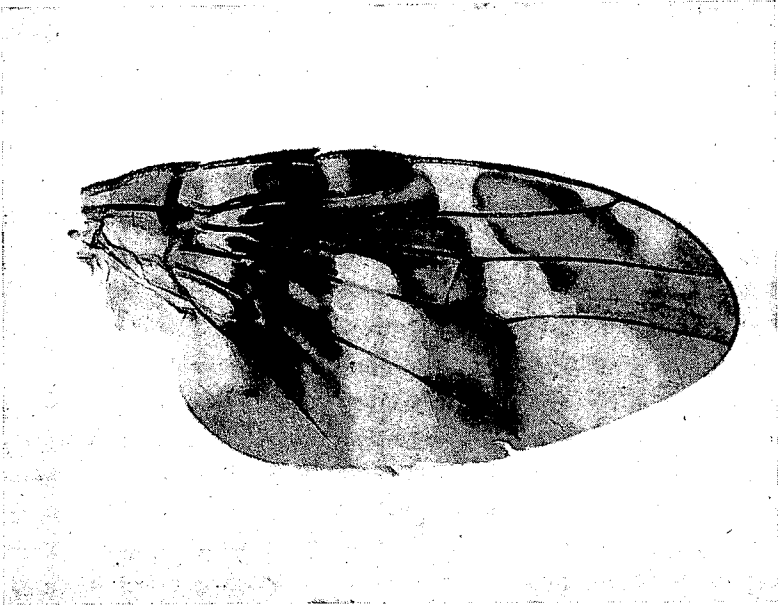


Figure 1. Wing of *Procecidochoares utilis* n.sp.